

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-10 (Cancelled)

Claim 11 (currently amended): An apparatus for processing a video signal comprising:

a detector to detect color gradation levels of an input video signal;

a generator to generate a plurality of dither coefficient signals, each coefficient signal carrying dither coefficients arranged in a matrix, weighting being applied to each dither coefficient for components of the input video signal ~~each, the components~~ having a gradation ~~levels level~~-equal to or lower than a predetermined level, the gradation levels being divided into low to high gradation groups in the order of level of the gradation, in which the weighting to be applied is constant in each gradation group whereas becomes larger as the gradation level of each components becomes for lower gradation groups; and

an adder to add one of the coefficient signals to the components of the input video signal, thus outputting a video signal.

Claim 12 (original): The apparatus according to claim 11, wherein each coefficient signal carrying positive and negative coefficients arranged in an (n x m) matrix where "n" and "m" being positive integers larger than zero, the sum total of the coefficients being zero.

Claim 13 (currently amended): An apparatus for processing a video signal comprising:

a detector to detect a color gradation level of each of a plurality of pieces of dot data arranged in an (n x m) matrix pattern, n and m being a positive integer larger than zero, and the dot data being carried by an input video signal, the (n x m) matrix pattern corresponding to a part of a plurality of pixels in a matrix display panel;

a generator to generate a plurality of first dither coefficients pattern signals each being selected from a plurality of predetermined dither coefficients pattern signals in accordance with the detected color gradation level of each dot data of the (n x m) matrix pattern, each generated first dither coefficients pattern signal carrying dither coefficients arranged in the (n x m) matrix pattern, weighting being applied to each dither coefficient for components of the input video signal, the components having gradation levels equal to or lower than a predetermined level, the gradation levels being divided into low to high gradation groups in the order of level of the gradation, in which the weighting to be applied is constant in each gradation group whereas larger for lower gradation groups;

a selector to select one of the dither coefficients from each generated first dither coefficients pattern signal, each dither coefficient thus selected corresponding, in position, to each dot data in the (n x m) matrix pattern, and to combine dither coefficients thus selected from all of the generated first dither coefficients pattern signals, thus producing a second dither coefficients pattern signal carrying the selected and combined dither coefficients arranged in the (n x m) matrix pattern;

an adjuster to adjust the dither coefficients of the second dither coefficients pattern signal so that the sum total of the dither coefficients of the second dither coefficients pattern signal is zero, thus producing a third dither coefficients pattern signal carrying the adjusted dither coefficients; and

an adder to add the third dither coefficient-adjusted pattern signal to the input video signal, thus outputting a video signal carrying the dot data to be supplied to the display panel.

Claim 14 (cancelled)

Claim 15 (previously presented): The apparatus according to claim 13 wherein the selector selects one dither coefficient for each predetermined unit of the dot data carried by the video signal or according to locations of the pixels on the display panel.

Claim 16 (cancelled)

Claim 17 (original): The apparatus according to claim 13, wherein each pattern signal carries an even number of the coefficients, addition of the coefficients in each of two group yielding zero when the coefficients are divided into the two groups, both groups including the same number of the coefficients.

Claim 18 (previously presented): The apparatus according to claim 13, wherein each pattern signal carries an odd number of the coefficients, the coefficient located at the center of the matrix pattern being zero.

Claim 19 (previously presented): The apparatus according to claim 13, wherein "n" and "m" are equal to each other.

Claim 20 (original): The apparatus according to claim 13, wherein each pattern signal carries the same number of the positive and the negative coefficients.

Claims 21-27 (cancelled)

Claim 28 (currently amended): A method of processing a video signal comprising the steps of:

detecting color gradation levels of an input video signal;

generating a plurality of dither coefficient signals, each coefficient signal carrying dither coefficients arranged in a matrix, weighting being applied to each dither coefficient for components of the input video signal each, the components having a gradation levels level-equal to or lower than a predetermined level, the gradation levels being divided into low to high gradation groups in the order of level of the gradation, in which the weighting to be applied ~~becomes~~ is constant in each gradation group whereas larger as the gradation level of each component becomes for lower gradation groups; and

adding one of the coefficient signals to the components of the input video signal, thus outputting a video signal.

Claim 29 (currently amended): A method of processing a video signal comprising the steps of:

detecting a color gradation level of each of a plurality of pieces of dot data arranged in an $(n \times m)$ matrix pattern, n and m being positive integer larger than zero, and the dot data being carried by an input video signal, the $(n \times m)$ matrix pattern corresponding to a part of a plurality of pixels in a matrix display panel;

generating a plurality of first dither coefficients pattern signals each being selected from a plurality of predetermined dither coefficients pattern signals in accordance with the detected color gradation level of each dot data of the $(n \times m)$ matrix pattern, each generated first dither coefficients pattern signal carrying dither coefficients arranged in the $(n \times m)$ matrix pattern, weighting being applied to each dither coefficient for components of the input video signal, the components having gradation levels equal to or lower than a predetermined level, the gradation levels being divided into low to high gradation groups in the order of level of the gradation, in which the weighting to be applied is constant in each gradation group whereas larger for lower gradation groups;

selecting one of the dither coefficients from each generated first dither coefficients pattern signal, each dither coefficient thus selected corresponding, in position, to each dot data in the $(n \times m)$ matrix pattern, and combining to combine dither coefficients thus selected from all of the generated first dither coefficients pattern signals, thus producing a second dither coefficients pattern signal carrying the selected and combined dither coefficients arranged in the $(n \times m)$ matrix pattern;

adjusting the dither coefficients of the second dither coefficients pattern signal so that the sum total of the dither coefficients of the second dither coefficients pattern signal is zero, thus producing a third dither coefficients pattern signal carrying the adjusted dither coefficients; and

adding the third dither coefficient-adjusted pattern signal to the input video signal, thus outputting a video signal carrying the dot data to be supplied to the display panel.

Claim 30 (cancelled)

Claim 31 (previously presented): The method according to claim 29 wherein the selection step comprises the step of selecting one dither coefficient for each predetermined unit of the dot data carried by the video signal or according to locations of the pixels on the display panel.

Claim 32 (previously presented): The method according to claim 29, wherein the first dither coefficients pattern signals are generated so that each pattern signal carries an even number of the coefficients, addition of the coefficients in each of two group yielding zero when the coefficients are divided into the two groups, both groups including the same number of the coefficients.

Claim 33 (previously presented): The method according to claim 29, wherein the first dither coefficients pattern signals are generated so that each pattern signal carries an odd number of the coefficients, the coefficient located at the center of the matrix pattern being zero.

Claims 34 – 35 (cancelled)